

What is claimed is:

1. An optical transmission line comprising:  
an optical transmission fiber having a chromatic dispersion of +4 to +10  
ps·nm<sup>-1</sup>·km<sup>-1</sup> and a dispersion slope of 0 to +0.04 ps·nm<sup>-2</sup>·km<sup>-1</sup> at the 1550 nm  
wavelength and installed in a relay section; and  
a module made of a dispersion compensating optical fiber having a  
chromatic dispersion of -40 ps·nm<sup>-1</sup>·km<sup>-1</sup> or less and a dispersion slope of -0.10  
ps·nm<sup>-2</sup>·km<sup>-1</sup> or less at the 1550 nm wavelength.

10 2. An optical transmission line according to Claim 1, wherein said optical  
transmission fiber has a dispersion slope of +0.01 to +0.03 ps·nm<sup>-2</sup>·km<sup>-1</sup>.

15 3. An optical transmission line according to Claim 1, wherein said optical  
transmission fiber has an effective area of 45  $\mu\text{m}^2$  or more at the 1550 nm  
wavelength.

20 4. An optical transmission line according to Claim 1, wherein said  
dispersion compensating optical fiber has a chromatic dispersion of -80 ps·nm<sup>-1</sup>·km<sup>-1</sup> or less and a dispersion slope of -0.20 ps·nm<sup>-2</sup>·km<sup>-1</sup> or less.

5. An optical transmission line according to Claim 4, wherein said  
dispersion compensating optical fiber has a chromatic dispersion of -100 ps·nm<sup>-1</sup>·km<sup>-1</sup> or less.

6. An optical transmission system comprising:

an optical transmission fiber having a chromatic dispersion of +4 to +10  
 $\text{ps} \cdot \text{nm}^{-1} \cdot \text{km}^{-1}$  and a dispersion slope of 0 to  $+0.04 \text{ ps} \cdot \text{nm}^{-2} \cdot \text{km}^{-1}$  at the 1550 nm  
wavelength and installed in a relay section;

5 a module made of a dispersion compensating optical fiber having a  
chromatic dispersion of  $-40 \text{ ps} \cdot \text{nm}^{-1} \cdot \text{km}^{-1}$  or less and a dispersion slope of  $-0.10 \text{ ps} \cdot \text{nm}^{-2} \cdot \text{km}^{-1}$  or less at the 1550 nm wavelength;

10 a transmitter; and

a receiver.